TABLE Z.—DR. NASKE. " STAHL UND EISEN," 1907, P. 232, TABLE 9.
3,280 kilogrammes ore melted down (1S'5 per cent.), on which
17,843 kilogrammes molten pig iron was charged,
and re-acted therewith.

| No. of Test. | Time Test Taken. | Mins. from Start. | Metal. | | | | Remarks. |
|---|---|---|---|---|---|---|---|
| | | | C | Si | Mn | p | |
| | | | Per cent. | Per cent. | Per cent. | Per cent. | |
| 1 | 1-20 | ---- | 3*90 | 1-03 | 1-56 | 0-14 | Analysis of pig iron. |
| 2 | 1-35 | 15 | 3-35 | 0-05 | 0-28 | 0-01 | |
| 3 | 2-15 | 55 | 2-51 | 0-05 | 0-24 | 0-01 | After test, 820 kilogrammes ore. |
| 4 | 2-40 | 80 | 1-69 | 0-05 | 0-24 | o-oi | |
| 5 | 3-20 | 120 | 0-66 | 0-05 | 0-31 | 0-01 | After test, 820 kilogrammes ore. |
| 6 | 3-50 | 150 | 0-29 | 0-05 | 0-35 | o-oi | |
| 7 | 4-10 | 170 | 0-07 | 0-02 | 0-39 | 0-02 | Pretest red short ; 50 kilogrammes Spiegel. |
| 8 | 4-20 | 190 | 0-07 | 0-02 | 0-39 | 0-02 | Final test. |

time of the first ore addition, contained carbon almost solely of the reducing agents, whilst the remaining oxygen consumers already were eliminated. Such a metal, therefore, demanded less oxygen. But this circumstance shows that the characteristic chosen by Dr. Naske, of oxygen consumed in the removal of reducing agents, cannot well be employed for a general comparative value of the performance of the furnace.

Similar results (i.e., acceleration of the carbon elimination) are shown also by the next example (Table Z), in which the ore had been subjected to the highest attainable temperatures in the open-hearth furnace, namely, was molten before the introduction of the pig iron.

Unfortunately, the slag analyses were not given, thus one cannot completely investigate the example.

One sees from the following diagrams (Figs. 29 and 30) that here also the carbon removal took up a large portion of the oxygen, although the remaining reducing agents for all that were removed immediately. The action of the molten ore